

What is claimed is:

1. An isolated polynucleotide comprising SEQ ID NO:1 wherein the nucleic acid at 1792 is A or C.
2. An isolated polynucleotide comprising a nucleic acid that encodes a polypeptide comprising SEQ ID NO:2, wherein the amino acid 598 is Thr or Pro
3. An isolated polynucleotide comprising SEQ ID NO:3.
4. An isolated polynucleotide comprising a nucleic acid that encodes a polypeptide comprising SEQ ID NO:4.
5. An isolated polynucleotide comprising a molecule selected from the group consisting of:
  - a) A polynucleotide that encodes a polypeptide comprising amino acid residues 384-687 of SEQ ID NO:2, wherein the amino acid at 598 is Thr or Pro;
  - b) A polynucleotide that encodes a polypeptide comprising amino acid residues 379-687 of SEQ ID NO:2, wherein the amino acid at 598 is Thr or Pro;
  - c) A polynucleotide that encodes a polypeptide comprising amino acid residues 389-685 of SEQ ID NO:4;
  - d) A polynucleotide that encodes a polypeptide comprising amino acid residues 379-685 of SEQ ID NO:4;
  - e) A polynucleotide that encodes a polypeptide comprising amino acid residues 449-687 of SEQ ID NO:2, wherein the amino acid at 598 is Pro or Thr;
  - f) A polynucleotide that encodes a polypeptide comprising amino acid residues 449-685 of SEQ ID NO:4
  - g) A polynucleotide that encodes a fragment of a polypeptide described in (a-g), wherein the fragment interacts with a signal transduction factor;
  - h) An isolated nucleic acid molecule that hybridizes to either strand of a denatured, double-stranded DNA comprising the polynucleotide of any one of a)-g) under conditions of moderate stringency in 50% formamide and 6XSSC, at 42°C with washing conditions of 60°C, 0.5XSSC, 0.1% SDS;
  - i) An isolated nucleic acid molecule that encodes a polypeptide that is at least 85% identical to the polypeptides described in a)-g), wherein the polypeptide interacts with a signal transduction factor;

100517727.1

10061727.132603

- j) A polynucleotide that is degenerate to any of the polynucleotides of a)-i).
- 6. An expression vector comprising a polynucleotide of claim 5.
- 7. An expression vector comprising a polynucleotide that encodes a polypeptide comprising SEQ ID NO:2, wherein the amino acid residue at 598 is Pro or Thr.
- 8. An expression vector comprising a polynucleotide that encodes a polypeptide comprising SEQ ID NO:4.
- 9. A host cell comprising the vector of claim 5.
- 10. A process of preparing a polypeptide, the process comprising culturing a host cell of claim 9 under conditions promoting expression of the polypeptide.
- 11. A process of preparing a polypeptide, the process comprising culturing a host cell transformed with a vector of claim 7 under conditions promoting expression of the polypeptide.
- 12. A polypeptide selected from the group consisting of:
  - a) A polypeptide comprising SEQ ID NO:2, wherein the amino acid at 598 is Thr or Pro;
  - b) A polypeptide comprising SEQ ID NO:4.
  - c) A polypeptide comprising amino acids 449-685 of SEQ ID NO:4;
  - d) A polypeptide comprising amino acids 449-687 of SEQ ID NO:2, wherein the amino acid at 598 is Thr or Pro;
  - e) A polypeptide comprising amino acids 384-687 of SEQ ID NO:2, wherein the amino acid at 598 is Thr or Pro;
  - f) A polypeptide comprising amino acids 379-687 of SEQ ID NO:2, wherein the amino acid at 598 is Thr or Pro
  - g) A polypeptide comprising amino acids 379-685 of SEQ ID NO:4;
  - h) A polypeptide comprising amino acids 389-685 of SEQ ID NO:4;
  - i) A polypeptide comprising a fragment of a polypeptide of a)-h) wherein the fragment interacts with a signal transduction factor.
  - j) A polypeptide that is at least 85% identical to a polypeptide of a)-g), wherein the polypeptide interacts with a signal transduction factor.
- 13. An antibody that is specific to a polypeptide of claim 10.
- 14. A method for screening for an agonist or antagonist of IL-1 comprising:
  - Contacting a polypeptide of claim 8 with an IL-1 family member and an IL-1 receptor family member in the presence of a candidate compound, and comparing the interaction of the polypeptide in the presence of the candidate compound with the interaction in the absence of the compound, whereby a

compound the modulates the interaction of the polypeptide is identified as an agonist or antagonist of the polypeptide of claim 8.

100061722 = 10025012